

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,605	01/24/2002	Steven Yellin Schondorf	201-0378 FAM	9340

28549 7590 12/29/2003

KEVIN G. MIERZWA  
ARTZ & ARTZ, P.C.  
28333 TELEGRAPH ROAD, SUITE 250  
SOUTHFIELD, MI 48034

EXAMINER

HERNANDEZ, OLGA

ART UNIT	PAPER NUMBER
----------	--------------

3661

DATE MAILED: 12/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/683,605

Applicant(s)

SCHONDORF ET AL.

Examiner

Olga Hernandez

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-9, 12-15, 22, 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 22 is/are allowed.
- 6) ☒ Claim(s) 4-8, 12-15 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Applicant's arguments with respect to claims 4-9, 12-15, 22 and 23 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-6, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byon (5,847,472) in view of Okada (2002/0091474).

As per claims 4, 12 and 14, Byon teaches:

- a memory device for storing a deployment time of a deployment event (column 7, lines 1-2); and
- a controller electrically coupled to the memory device (figure 1), the controller determining when to deploy a restraint and storing the deployment time (column 6, lines 64-67);
- fault time, start time, duration time and end time (column 6, lines 64-67).

Art Unit: 3661

Byon does not teach a comparator coupled to the controller for comparing the deployment time with the fault a fault time and determining whether the fault time corresponds with the deployment time. However, Okada teaches tracking down the relationship between the operation state of the airbag and the failure of the operation control section of the airbag (paragraph [0006]). Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to track down the cause of the collision with small memory capacity.

As per claim 15, neither of the prior art teaches the memory device that is unerasable, unresettable and unoverwritable. However, it would have been obvious to one of ordinary skill in the art to substitute a storage device for another storage device in order to make sure that the information will not be lost.

As per claim 5, Byon does not teach indicating when a deployment time corresponds with a fault time. However, Okada teaches track down the relationship between the operation state of the airbag and the failure of the operation control section of the airbag (paragraph [0006]). Moreover, Okada teaches the data indication no matter the situation (paragraph [0007]).

As per claim 6, neither Byon nor Okada teaches the indicator disclosed by the applicant. However, Okada teaches the data indication no matter the situation (paragraph [0007]). Therefore, it would have been obvious to one of ordinary skill in the art to substitute any means for another means to perform the same function.

5. Claims 7, 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byon (5,847,472) in view of Otsu (6,231,075).

As per claims 7 and 8, Byon teaches:

Art Unit: 3661

- a memory device for storing a deployment time of a deployment event (column 7, lines 1-2); and
- a controller electrically coupled to the memory device (figure 1), the controller determining when to deploy a restraint and storing the deployment time (column 6, lines 64-67).

Byon does not teach an indicator electrically coupled to the controller, the indicator continuously indicating that the RCM has been on a vehicle that has been involved in a collision, until such time when the RCM is serviced or replaced. However, Otsu teaches a controller continuous monitoring the waveform of the collision signal provided by the collision sensor after the first squib has been initiated (column 5, line 17-31). Further, it would have been obvious to one of ordinary skill in the art that it will keep doing so until is replaced or get some kind of service. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to provide an automotive airbag inflator for controlling an inflating speed of an airbag according to an intensity of an impact in dependency on collision modes of the vehicle against an obstacle.

As per claim 13, Byon does not teach an indicator electrically coupled to the controller, the indicator continuously indicating that the RCM has been on a vehicle that has been involved in a collision, until such time when the RCM is serviced or replaced. However, Otsu teaches a controller continuous monitoring the waveform of the collision signal provided by the collision sensor after the first squib has been initiated. Further, it would have been obvious to one of ordinary skill in the art that it will keep doing so until is replaced or get some kind of service. Therefore, it would have been obvious to one of

Art Unit: 3661

ordinary skill in the art to combine the aforementioned inventions in order to provide an automotive airbag inflator for controlling an inflating speed of an airbag according to an intensity of an impact in dependency on collision modes of the vehicle against an obstacle.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byon (5,847,472).

Byon teaches sensing a collision (column 6, line 42); generating a collision signal in response to the collision (column 6); deploying a restraint in response to the collision (column 7); storing the deployment time (column 6, lines 64-67) and continuously indicating a fault in response to the deployment event (column 7).

***Allowable Subject Matter***

Claims 9 and 22 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: no prior art teaches storing the restraint power draw value during the deployment event.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is (703) 305-0918. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone

Art Unit: 3661

number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

A handwritten signature in black ink, appearing to be 'Olga Hernandez', with a stylized, cursive script.

Olga Hernandez  
Examiner  
Art Unit 3661